

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-034840

(43)Date of publication of application : 07.02.1997

(51)Int.Cl. G06F 15/00
G10K 15/04
H04N 7/16

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(54) INFORMATION PROVISION TERMINAL EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent illegal use of information by permitting information service when decoding result information is correct and storing the decoding result information.

SOLUTION: A karaoke (a recorded orchestral accompaniment) equipment 10 connecting to a center equipment 30 is provided with a CPU being a control means acting like a provision meansa decoding meansa correctness discrimination meansa permission means and a storage command means. Then a CPU of the karaoke equipment 10 discriminates the correctness of permission information (decoding result information) depending on whether or not the permission information (decoding result information) obtained by this communication forms a series number with preceding permission information and operates the karaoke equipment 10 normally and terminates the operation control processing when the information is correct. On the other handwhen the permission information (decoding result information) is not correctthe CPU stops the operation of the karaoke equipment 10 and terminates the operation control processing. In this caseit is enough for the stop of the operation of the karaoke equipment 10 such that karaoke music data cannot be read out of a hard disk memory.

CLAIMS

[Claim(s)]

[Claim 1]An offer-of-information terminal provided with an information storage means characterized by comprising the following which memorizes informationand an offer-of-information means to perform an offer of information using information

memorized by this information storage means.

A coding information acquisition means which acquires code permit information from a center apparatus.

A restoring means which restores restoration result information by acquired this code permit information and permit information already memorized by permit information memory measure.

A judging means of corrigenda which judges correction of this restoration result information.

A permission means to which this restoration result information permits an offer of information to said offer-of-information means at the time of the right.

A memory directing means which said permit information memory measure is made to memorize by making said restoration result information into new permit information.

[Claim 2]An offer-of-information terminal forming a restoration result information-sending means to send out said restoration result information to said center apparatusin the offer-of-information terminal according to claim 1.

[Claim 3]A center apparatus comprising:

The center side permit information memory measure which memorizes permit information for every offer-of-information terminal according to claim 1 or 2.

An encoding means which performs data processing to permit information of the offer-of-information terminal memorized by permit information which it is newly going to notify to said offer-of-information terminaland said center side permit information memory measureand creates code permit information.

A code permit information delivery means which sends out created this code permit information to the offer-of-information terminal.

The center side memory directing means which makes said center side permit information memory measure memorize said new permit information.

[Claim 4]The center apparatus comprising according to claim 3:

A restoration result information acquisition means which acquires said restoration result information sent from the offer-of-information terminal according to claim 2.

A restoration result information storage means which memorizes acquired this restoration result information for said every offer-of-information terminal.

[Claim 5]A telecommunications system comprising:

The offer-of-information terminal according to claim 1 or 2.

The center apparatus according to claim 3.

[Claim 6]A telecommunications system comprising:

The offer-of-information terminal according to claim 2.

The center apparatus according to claim 4.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the telecommunications system containing such an offer-of-information terminal provided with the information storage means which memorizes information and an offer-of-information means to perform an offer of information using the this memorized information the center apparatus which gives permission of an offer of information to this offer-of-information terminal and an offer-of-information terminal and a center apparatus.

[0002]

[Description of the Prior Art] It has an information storage means which memorizes information and an offer-of-information means to perform an offer of information using the this memorized information conventionally there is an offer-of-information terminal which obtains permission of the offer of information by a center apparatus and carries out an offer of information and a communication type karaoke device is mentioned as an example.

[0003] In this communication type karaoke device karaoke music information is distributed in accordance with the contract made with the receiver (owner side of a karaoke device) of karaoke music information the distribution side (administrator side of a center apparatus) of karaoke music information For example usually the usage fee of the karaoke music information according to the distribution number a use count etc. of karaoke music information is paid to the distribution side of karaoke music information from the receiver of karaoke music information. And the licence of karaoke music information is given in exchange for the payment of this usage fee. In communication with the center apparatus performed periodically for example every month specifically the licence of karaoke music information was given when a karaoke device received licence information from a center apparatus.

[0004]

[Problem(s) to be Solved by the Invention] However in the Prior art the contents of the order information sent out from a center apparatus according to the demand of the licence of the karaoke music information from a karaoke device were only distinction of "permission" or "disapproval." For this reason when analyzing communication with a center apparatus and a karaoke device it was also possible to have given a fake permission command to a karaoke device using the device which replaces a center apparatus and to have used a karaoke device out of a contract.

[0005] Such a problem needed the payment of the remuneration when using not only a karaoke device but information and existed similarly at the offer-of-information terminal in which a certain regulation is imposed to use of information. This invention is made in order to solve the problem mentioned above and an object of this invention is to need the payment of a remuneration when using information or to prevent use of the unjust information in the offer-of-information

terminal in which a certain regulation is imposed to use of information.

[0006]

[Means for Solving the Problem]As a means for solving an aforementioned problemthe offer-of-information terminal according to claim 1 is provided with the following.

An information storage means which memorizes information.

A coding information acquisition means which acquires code permit information from a center apparatus in an offer-of-information terminal provided with an offer-of-information means to perform an offer of information using information memorized by this information storage means.

A restoring means which restores restoration result information by acquired this code permit information and permit information already memorized by permit information memory measure.

A memory directing means which a judging means of corrigenda which judges correction of this restoration result informationand this restoration result information make said permit information memory measure remember to be a permission means to which an offer of information is permitted to said offer-of-information means by making said restoration result information into new permit information at the time of the right.

[0007]In an offer-of-information terminal of this compositiona coding information acquisition means acquires code permit information from a center apparatus. A restoring means restores restoration result information by acquired code permit information and permit information already memorized by permit information memory measure. A judging means of corrigenda judges correction of restoration result information. As for a permission meansrestoration result information permits an offer of information to an offer-of-information means at the time of the right. A permit information memory measure is made to memorize a memory directing means by making restoration result information into new permit information.

[0008]thusit comes out as it isand code permit information acquired from a center apparatus is not usedbut code permit information and permit information memorized by permit information memory measure restore restoration result informationand an offer of information is permitted for it at the time of the right. And restoration result information is memorized by permit information memory measure as new permit informationand is used for restoration of next restoration result information.

[0009]Thereforeeven if it analyzes communication with a center apparatus and an offer-of-information terminalrestoration result information cannot be acquired only by it. Thereforegiving a fake permission command to an offer-of-information terminal using a device which replaces a center apparatusand using it out of a contract is prevented. Since restoration result information is used for restoration of next restoration result informationif it is not used regularly continuouslyit cannot use acquiring right restoration result informationi.e.an offer-of-information terminal. Security increases also in this point.

[0010]What the device itself is not worked for by making impossible powering on of an offer-of-information terminal etc. as an example which forbids an offer of informationA function of some devices of not operating a key for inputting an indispensable command into an offer of information is suspendedAlthough the device itself is normalit is made to be unable to read information from a memory measureor scramble processing etc. are performed to information memorized by memory measureand not making the scramble cancel etc. is mentioned. It is good one if a normal offer of information cannot be performed in short.

[0011]The offer-of-information terminal according to claim 2 formed a restoration result information-sending means to send out said restoration result information to said center apparatusin the offer-of-information terminal according to claim 1. In an offer-of-information terminal of this compositiona restoration result information-sending means sends out restoration result information to a center apparatus. If this is compared by the center apparatus sideaccording to the correctionit can be known whether an offer-of-information terminal is used regularly.

[0012]The center apparatus according to claim 3 is provided with the following. The center side permit information memory measure which memorizes permit information for every offer-of-information terminal according to claim 1 or 2. An encoding means which performs data processing to permit information of the offer-of-information terminal memorized by permit information which it is newly going to notify to said offer-of-information terminaland said center side permit information memory measureand creates code permit information. A code permit information delivery means which sends out created this code permit information to the offer-of-information terminal. The center side memory directing means which makes said center side permit information memory measure memorize said new permit information.

[0013]In a center apparatus of this compositionthe center side permit information memory measure memorizes permit information for every offer-of-information terminal. An encoding means performs data processing to permit information of the offer-of-information terminal memorized by permit information which it is newly going to notify to an offer-of-information terminaland the center side permit information memory measureand creates code permit information. A code permit information delivery means sends out created code permit information to the offer-of-information terminal. The center side memory directing means makes the center side permit information memory measure memorize new permit information.

[0014]In this center apparatuspermit information is not notified as it isbut once it considers it as code permit informationit notifies to an offer-of-information terminal. And when encipheringthe last permit information is used as a key of encryption. Thereforesecurity of the code permit information itself notified to an offer-of-information terminal from a center apparatus is high.

[0015]The center apparatus according to claim 4 is provided with the following. A restoration result information acquisition means which acquires said restoration

result information sent from the offer-of-information terminal according to claim 2 in the center apparatus according to claim 3.

A restoration result information storage means which memorizes acquired this restoration result information for said every offer-of-information terminal.

[0016]In this center apparatus a restoration result information acquisition means acquires restoration result information sent from an offer-of-information terminal. A restoration result information storage means memorizes acquired restoration result information for every offer-of-information terminal. If this restoration result information is compared using permit information or code permit information according to that correction it can be known whether an offer-of-information terminal is used regularly. Collating work is also easy if an operation program in which this restoration result information corresponds with permit information is used.

[0017]The telecommunications system according to claim 5 contains the offer-of-information terminal according to claim 1 or 2 and the center apparatus according to claim 3. This telecommunications system is provided with same advantage with having described an above-mentioned offer-of-information terminal according to claim 1 or 2 and the center apparatus according to claim 3.

[0018]The telecommunications system according to claim 6 contains the offer-of-information terminal according to claim 2 and the center apparatus according to claim 4. This telecommunications system is provided with same advantage with having described an above-mentioned offer-of-information terminal according to claim 2 and the center apparatus according to claim 4.

[0019]

[Embodiment of the Invention]Next the example which materialized the offer-of-information terminal of this invention as a karaoke device is explained with reference to drawings as explanation of an embodiment of the invention. The composition of this example is explained first. The outline lineblock diagram of the communications system with which the karaoke device of this example is contained as for drawing 1 to refer to The block diagram in which drawing 2 shows the composition of the karaoke device of an example the block diagram in which drawing 3 shows the composition of the center apparatus of this communications system The explanatory view of the system-operating-status management table in which drawing 4 is stored in the memory storage of a center apparatus and a permit information table and drawing 5 are the block diagrams of the music distribution system which distributes music data to a karaoke device.

[0020]As shown in drawing 1 it is connected to the center apparatus 30 via the 1st communications network 61 and the karaoke device 10 is connected to the music distribution system 50 via the 2nd communications network 62. The music distribution system 50 is a device known as a host device what is called in a communication karaoke system and is a device for distributing the music data for karaoke playing according to the distribution request from the karaoke device 10. The center apparatus 30 is a device for giving the licence of the music data

distributed from the operation permission 50 i.e. a music distribution system to the karaoke device 10. Although the karaoke device 10 is illustrating only one set many karaoke devices 10 are actually connected to the center apparatus 30 and the music distribution system 50.

[0021] As shown in drawing 2 the karaoke device 10 is provided with CPU11 which is a control means and functions as the offer-of-information means the restoring means the judging means of corrigenda permission means and memory directing means of this invention. It is a means of communication and the communication control unit 12 as the coding information acquisition means of this invention and a restoration result information-sending means is connected to this CPU11. The communication control unit 12 is connected to the 1st communications network 61 and the 2nd communications network 62 and CPU11 can communicate the communication control unit 12 with the center apparatus 30 via through and the 1st communications network 61 and can communicate with the music distribution system 50 via the 2nd communications network 62.

[0022] In CPU11. Are the operation program of CPU11 etc. RAM14 and the memory measure used as the work area of ROM13 stored and CPU11 and as an information storage means of this invention. As an input means for inputting various kinds of directions into ** hard disk memory (HDD) 15 and CPU11. the time check which computes the ** multiple-purpose input key 16 and the present date and time -- the electronic timer 17 as a means the graphic processing device 18 which functions as an offer-of-information means in collaboration with CPU11 and the sound source 19 are connected.

[0023] The monitor 20 as a displaying means is connected to the graphic processing device 18 and the amplifier 21 is connected to the sound source 19. The loudspeaker 22 and the microphone 23 are connected to the amplifier 21. Although the karaoke music data for thousands of music is beforehand memorized by the hard disk memory 15 renewal of a memory content is possible for carrying out additional memory of the new karaoke music data or deleting karaoke music data with very little frequency in use for example etc.

[0024] Each karaoke music data is constituted from the identification information which consists of a track name a music number etc. for identifying each music (correctly each karaoke music data) and the substance information for karaoke playing by this example. The playing data for the performance sound reproduction described by the MIDI (Musical Instrument Digital Interface) standard that substance information is publicly known It comprises title data for displaying a title screen including the ***** data for lyrics telop a track name a songwriter name a composer name etc. picture image data for background video reproduction of a lyrics telop etc.

[0025] In this example once it is necessary to acquire permit information and acquires permit information by communication with the center apparatus 30 using karaoke music data karaoke music data can be used at any time for one month after that. If attached to the processing in connection with acquisition of this permit information it explains in full detail later.

[0026]Nextthe composition of the center apparatus 30 is explained with reference to drawing 3. As shown in drawing 3the center apparatus 30 comprises the host device 31 and the terminal 32 for surveillance. The host device 31Are a control means and as the encoding means of this inventionand a center side memory directing means. Are the ** host computer 33 and a memory measureare the memory storage 34 as the center side permit information memory measure and restoration result information storage means of this inventionand a means of communicationand it has the communication control unit 35 as the code permit information delivery means of this inventionand a restoration result information acquisition meansThe communication control unit 35 is connected to the 1st communications network 61.

[0027]The terminal 32 for surveillance is provided with CRT38 as the microcomputer (microcomputer) 36 as a control meansthe keyboard 37 as an input meansand a displaying meansand the printer 39 as a printing means. The memory storage 34 is provided with the permit information table 71 and the system-operating-status management table 70 which are shown in drawing 4. It is the composition that the permit information for every karaoke device 10 is memorizedand the restoration result information transmitted to the system-operating-status management table 70 from each karaoke device 10 is memorized in the permit information table 71. Various control programs for the host computer 33 to operate etc. have memorized the memory storage 34.

[0028]The terminal 32 for surveillance can input various kinds of data into the host device 31or is a device for picking out data from the host device 31and can display an I/O data on CRT38or the printer 39 can be made to print it. Nextthe composition of the music distribution system 50 is explained with reference to drawing 5.

[0029]As shown in drawing 5the music distribution system 50 comprises the host device 51 and the terminal 52 for surveillance. Since each part which constitutes the music distribution system 50 is the same composition as each part of the center apparatus 30detailed explanation is omitted. Howeverthe music data of a huge quantity for distributing to the karaoke device 10 is memorized by the memory storage 54and the communication control unit 55 is connected to the 2nd communications network 62.

[0030]Nextwhether it is made to lendin order [which operates the karaoke device 10] to determineand in orderThe flow chart of the motion-control processing shown in drawing 6 about the motion-control processing which CPU11 performs periodicallyIt explains with reference to the explanatory view of the encryption shown in the flow chart and drawing 8 of permit information transmitting processing which the host computer 33 of the center apparatus 30 shown in drawing 7 performsand decoding processing. In this examplewhenever CPU11 changes the date whenever the karaoke device 10 is started andit is the composition of performing motion-control processing.

[0031]If motion-control processing is started as shown in drawing 6CPU11 will judge whether the predetermined period has passed since acquisition of the last

permit information (Step 100 and a following step are only described as S). In this example since the predetermined period is set to one month CPU11 will judge whether one month has passed since acquisition of the last permit information. When one month has not passed here (S100:NO) and CPU11 ends this motion-control processing. On the other hand if one month has passed (S100:YES) it will progress to S110 and CPU11 will communicate with the center apparatus 30 and will acquire code permit information.

[0032] In the center apparatus 30 if the needed information from the karaoke device 10 occurs the host computer 33 via the communication control unit 35A line number a password etc. of a communication line to which the password sent from the karaoke device 10 is received for example the karaoke device 10 is connected perform terminal collation. If it is the karaoke device 10 registered into the center apparatus 30 collation normalcy will be returned and permit information transmitting processing shown [that a demand is sent from the karaoke device 10 and] in drawing 7 if waiting and this are the Requests to Send of code permit information is performed.

[0033] As shown in drawing 7 the host computer 33 will first read the permit information (last permit information) given last time to the karaoke device 10 which has required transmission of code permit information from the permit information table 71 of the memory storage 34 if permit information transmitting processing is started (S200). Next the host computer 33 determines the permit information for giving the karaoke device 10 this time (S210).

[0034] Since this permit information serves as consecutive numbers every karaoke device 10 if permit information is 9502 last time as shown for example in drawing 8 this permit information will be set to 9503. Thus the information about permit information serving as consecutive numbers is also given to the karaoke device 10 and is used in the judgment of the correction of the permit information mentioned later.

[0035] As shown in drawing 7 the host computer 33 computes code permit information by encryption processing (S220). In this example this code permit information serves as the sum (19005) of permit information (9502) and this permit information (9503) last time as shown in drawing 8.

[0036] Next the host computer 33 transmits code permit information to the karaoke device 10 (S230) writes this permit information (9503) in the permit information table 71 of the memory storage 34 and updates the permit information table 71 (S240). As shown in drawing 6 after CPU11 of the karaoke device 10 acquires the code permit information sent from the center apparatus 30 as mentioned above (S110) it restoration--ization--processes code permit information last time using permit information and acquires restoration result information (S120). And the hard disk memory 15 is made to memorize by making the restoration result information into permit information (S130).

[0037] As shown in drawing 8 the restoration-ized processing by CPU11 of the karaoke device 10 is processing which subtracts permit information (9502) from code permit information (19005) last time and the restoration permit information

searched for becomes the same thing as this permit information that the host computer 33 determined as mentioned above. Permit information is the permit information (restoration result information) acquired by the last same processing used here last time.

[0038]As shown in drawing 6 CPU11 of the karaoke device 10 transmits restoration result information to the center apparatus 30 and ends communication. As shown in drawing 7 in the center apparatus 30 the host computer 33 The restoration result information sent from the karaoke device 10 is received (S250) this is written in the system-operating-status management table 70 of the memory storage 34 the system-operating-status management table 70 is updated (S260) and this processing is ended.

[0039]As shown in drawing 6 CPU11 of the karaoke device 10 By whether the permit information (restoration result information) acquired by this communication is permit information and consecutive numbers last time the correction of permit information (restoration result information) is judged if this is right (S150: YES) normal operation of the karaoke device 10 will be enabled (S160) and this motion-control processing will be ended.

[0040]On the other hand if permit information (restoration result information) is not right (S150: NO) CPU11 stops operation for the karaoke device 10 (S170) and ends this motion-control processing. That this does not have right permit information (restoration result information) For example the code permit information of the past which analyzed and obtained the former communication with the center apparatus 30 this karaoke device 10 or other karaoke devices 10 It is because a possibility that the act which is going to give a fake permission command to the karaoke device 10 and is going to use the karaoke device 10 out of a contract such as having been transmitted using the device which replaces the center apparatus 30 was made is very high and is for preventing the unauthorized use of such a karaoke device 10.

[0041]stopping operation of the karaoke device 10 Since it is enough if the karaoke device 10 changes into the state where it cannot be used for original use i.e. karaoke it is enough to change into the state where it is not necessary to stop thoroughly [a device] for example and karaoke music data cannot be read from the hard disk memory 15 etc.

[0042]In [acquire right permit information (restoration result information) and] the state where the karaoke device 10 can operate When a user inputs a request with the multiple-purpose input key 16 or the remote control which is not illustrated CPU11 The karaoke music data corresponding to the request is read from the hard disk memory 15 the playing data of them is transmitted to the sound source 19 and title data lyrics data and picture image data are transmitted to the graphic processing device 18.

[0043]The sound source 19 compounds performance signals based on playing data and outputs this to the amplifier 21. The amplifier 21 mixes and amplifies a user's singing voice signal and performance signals which are inputted from the microphone 23 and outputs them to the loudspeaker 22. From the loudspeaker 22 voice response of a performance sound and the singing voice is carried out.

[0044]The graphic processing device 18 outputs video signals such as a lyrics telop superimposed to a title screen, a background video, and a background video to the monitor 20 to the timing which synchronizes with performance signals. To compensate for a performance start, a title screen is displayed on the monitor 20 and the lyrics telop superimposed to the background video is displayed on it according to advance of a performance. In this way, the user can enjoy karaoke.

[0045]As mentioned above, although the embodiment of the invention was described according to the example, it cannot be overemphasized that it can carry out variously in the range which this invention is not limited to such an example and does not deviate from the gist of this invention. Although the karaoke device is mentioned as an example of an offer-of-information terminal by the example, this invention is applicable to offer-of-information terminals other than a karaoke device, for example, a video game machine, a fortune-telling device, a street terminal device, etc.

[0046]Permit information is determined by the fixed standard by the center apparatus side, should just hold the judging standard corresponding to the decision criteria by the offer-of-information terminal side, and does not have to make it consecutive numbers like the above-mentioned example. Although two, the 1st communications network and the 2nd communications network are used by the example, the 1st communications network and the 2nd communications network may be made to make it serve a double purpose with one communications network.

[0047]

[Effect of the Invention]as explained above, according to the offer-of-information terminal according to claim 1, it comes out as it is, and the code permit information acquired from a center apparatus is not used, but code permit information and the permit information memorized by the permit information memory measure restore restoration result information, and an offer of information is permitted for it at the time of the right. And restoration result information is memorized by the permit information memory measure as new permit information, and is used for restoration of next restoration result information.

[0048]Therefore, even if it analyzes communication with a center apparatus and an offer-of-information terminal, restoration result information cannot be acquired only by it. Therefore, giving a fake permission command to an offer-of-information terminal using the device which replaces a center apparatus, and using it out of a contract is prevented. Since restoration result information is used for restoration of next restoration result information, if it is not used regularly, continuously, it cannot use acquiring right restoration result information, i.e., an offer-of-information terminal. Security increases also in this point.

[0049]According to the offer-of-information terminal according to claim 1 in the offer-of-information terminal according to claim 2a, restoration result information-sending means sends out restoration result information to a center apparatus. If this is compared by the center apparatus side, according to the correction, it can be known whether the offer-of-information terminal is used regularly.

[0050]According to the center apparatus according to claim 3, permit information is

not notified as it is but once it considers it as code permit information it notifies to an offer-of-information terminal. And when enciphering the last permit information is used as a key of encryption. Therefore the security of the code permit information itself notified to an offer-of-information terminal from a center apparatus is high.

[0051] According to the center apparatus according to claim 4 a restoration result information acquisition means acquires the restoration result information sent from an offer-of-information terminal. A restoration result information storage means memorizes the acquired restoration result information for every offer-of-information terminal. If this restoration result information is compared using permit information or code permit information according to that correction it can be known whether the offer-of-information terminal is used regularly. Collating work is also easy if an operation program in which this restoration result information corresponds with permit information is used.

[0052] The telecommunications system according to claim 5 demonstrates the effect by an offer-of-information terminal according to claim 1 or 2 and the center apparatus according to claim 3. The telecommunications system according to claim 6 demonstrates the effect by an offer-of-information terminal according to claim 2 and the center apparatus according to claim 4.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is an outline lineblock diagram of the communications system of an example.

[Drawing 2] It is a block diagram showing the composition of the karaoke device used as the component of the communications system of drawing 1.

[Drawing 3] It is a block diagram showing the composition of the center apparatus of the communications system of drawing 1.

[Drawing 4] It is an explanatory view of a system-operating-status management table and a permit information table stored in the memory storage of a center apparatus.

[Drawing 5] It is a block diagram of the music distribution system which distributes music data to a karaoke device in the communications system of drawing 1.

[Drawing 6] It is a flow chart of the motion-control processing which CPU of the karaoke device of an example performs.

[Drawing 7] It is a flow char of the permit information transmitting processing which the host computer of the center apparatus of an example performs.

[Drawing 8] It is an explanatory view of the encryption in an example and decoding processing.

[Description of Notations]

10 ... Karaoke device (offer-of-information terminal)

11 ... CPU (an offer-of-information means a restoring means a judging means of

corrigenda permission means memory directing means)

12 ... Communication control unit (a coding information acquisition means restoration result information-sending means)

15 ... Hard disk memory (information storage means)

16 ... Multiple-purpose input key

17 ... Electronic timer

18 ... Graphic processing device (offer-of-information means)

19 ... Sound source (offer-of-information means)

20 ... Monitor

21 ... Amplifier

22 ... Loudspeaker

23 ... Microphone

30 ... Center apparatus

31 ... Host device

32 ... Terminal for surveillance

33 ... Host computer (an encoding means the center side memory directing means)

34 ... Memory storage (the center side permit information memory measure restoration result information storage means)

35 ... Communication control unit (a code permit information delivery means restoration result information acquisition means)

37 ... Keyboard

39 ... Printer

50 ... Music distribution system

51 ... Host device

52 ... Terminal for surveillance

54 ... Memory storage

55 ... Communication control unit

61 ... The 1st communications network

62 ... The 2nd communications network

70 ... System-operating-status management table

71 ... Permit information table.
